

To avoid crisis like Ebola outbreak in future, India must invest in developing vaccines for various types of diseases. Justify. ②

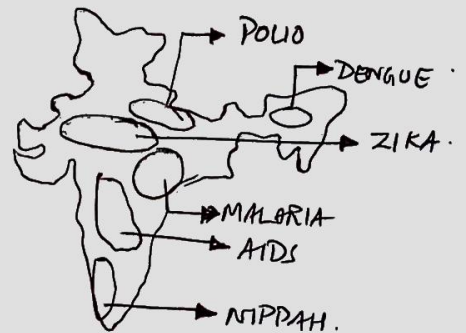
India's climatic and regional diversity is naturally favourable for the incidences of diseases. Given the scale of population, infectious parasitic diseases pose challenge to public health system. The Ebola outbreak in DRC has cautioned red alert for pandemic situation. To curtail this crisis, vaccination is cost effective public health intervention.

NEED FOR VACCINATION DEVELOPMENT

Immunisation is the primary defense to fight immediately against illness and emerging diseases. Universal Immunisation Programme seeks to vaccinate 25 million children. Apart from vaccine delivery at mass rate, it must be compensated by investment, research for the following reasons.

1) Higher Disease burden:-

Global disease burden report 2018 reports India to be top priority country in world's deadliest diseases - TB, AIDS, malaria, Typhoid. They constitute nearly 50% of population.



2) Lower accessibility to vaccine:-

Scalability of UIP programme is hindered due to non-availability of vaccine stocks. On the other hand, the tribal pockets infested with extremism is unaccountable compounding immunity problem.

ENDEMIC REGIONS OF DISEASE INCIDENCE IN INDIA - 2018

example:- Global Malarial report 2019 attributes effective malarial vaccination techniques of Odisha

3) Unique strains of infectious agents:-

Dev Evolution of unique, indigenous strains of organisms need research and India specific vaccination.

example:- Development of Rotavac was attributed to unique dominant Indian strain virus

4) POPULATION PROBLEMS:-

Statistise disease burden reports higher IMR, adolescent disease prevalence due to improper vaccination schedules. Poverty related problems exacerbate issue, have led to increasing DALY index.

example:- Re-emergence of polio, measles cases due to improper adoption of phases of vaccination - WHO.

5) Patent and cost problems:-

Vaccine patents rates are poor due to lack of research, development. Cost of preparation by pharma companies is high due to stricter environmental, ethical, biodiversity clearances. TRIPS related dispute due to low cost vaccine development.

Vaccine development and research is thus a must for having a long sustaining social welfare programme. for economic, social and environmental benefits.

TOWARDS INDIGENISATION

India has embarked on VIP, Electronic Vaccine Intelligence Network (EVIN) collaborations with EV for HORIZON 2020 programme, Biotechnology startup creation. However, this gravity of involvement must be backed by.

- Budgetary allocation for R&D
- Public - private collaborations
- Community health care centres
- Tracking immunisation programmes real time.

Timely investment, effort can solve the malnutrition crisis and ensure a healthy generation for future.